# CHRISTINE D. HOPKINS

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# **OBJECTIVE**:

To obtain a career in technical advising in the sciences, ultimately working towards status as a patent agent and attorney.

## **EDUCATION**:

College of William and Mary College of Arts and Sciences

Candidate for Master of Science Degree in Applied Science (expected December 2005)

College of William and Mary

College of Arts and Sciences

Graduate - Unclassified

RESEARCH: Time-of-Flight Secondary Ion Mass Spectrometry (ToF-SIMS) investigation of biomolecules deposited on select substrates deemed optimal for subsequent detection and imaging.

Virginia Polytechnic Institute and State University College of Arts and Sciences Bachelor of Science in Biology, Minor in Chemistry, August 2002

#### **EXPERIENCE**:

- ➤ Graduate Student/Laboratory Assistant: College of William and Mary, Applied Research Center, Newport News, VA, August 2003-present. Trained in the utilization of the above mentioned surface characterization techniques. Provide assistance in laboratory tours, purchase of laboratory equipment and supplies, sample preparations and data analysis. Assisting others in equipment use.
- ➤ Research Volunteer: College of William and Mary, INCOGEN, Inc. and Eastern Virginia Medical School, Williamsburg, VA, May 2003-August 2003. Assisted with research pertaining to collaborative efforts between these institutes in mass spectrometry, disease diagnosis and cancer research.
- **Personal Trainer, Fitness Instructor:** Kingsmill Resort, Williamsburg, VA, August 2002-January 2004. Provide correct exercise procedures to members and guests of all ages.
- ➤ **Personal Trainer, Fitness Assistant:** Radford Wellness and Fitness Center, Radford, VA, December 2001-August 2002. Helping members become oriented with equipment, assisting clients on a personal basis.
- ➤ **Personal Trainer:** Virginia Polytechnic Institute, Blacksburg, VA, August 2001-May 2002. Assisting clients, on a personal basis, in reaching their maximum physical capabilities.
- ➤ Research Volunteer: Eastern Virginia Medical School, Norfolk, VA, May 2001-August 2001. Assisted in laboratory research for on-going cancer research project. Performed Immunohistochemistry on surgical breast tissue used to determine the correlation between cell signaling proteins and cancer. Processed human blood samples for serum proteomic studies. Became familiarized with PubMed through numerous searches for scientific literature. Observed a prostatectomy. Attended a summer course in Tumor Biology.

#### **SKILLS:**

- **Computer:** Microsoft Word, PowerPoint, Slideshow, MATLAB, S-Plus, PC compatible
- Academic Laboratory: Gas Chromatography, Infrared Spectroscopy, Thin Layer Chromatography, Microscale distillation/extraction; basic biological, chemical and physics laboratory skills
- Clinical Laboratory: production of molar solutions; Immunohistochemistry; reviewing slides microscopically
- ➤ Surface Characterization Laboratory: TOF-SIMS (Time-of-Flight Secondary Ion Mass Spectrometry); Dektak³ST (Surface Profilometry System); Zeiss Optical Microscope; SEM (Secondary Electron Microscopy); EDS (Energy Dispersive X-Ray Spectroscopy); Shimadzu Vickers Microhardness Tester; STM (Scanning Tunneling Microscopy); AFM (Atomic Force Microscopy); XPS (X-ray Photoelectron Spectroscopy), Hirox Imaging System, Variable Angle Spectroscopic Ellipsometer, Hummer Sputter Coater

### **ACTIVITIES AND HONORS:**

- ➤ 2<sup>nd</sup> place, poster presentation, American Vacuum Society regional meeting, *The Use of Time-of-Flight SIMS to Provide High Mass Molecular Ion Identification of Selected Peptide Hormones on Silver Substrate.*
- ➤ Secretary, Graduate Student Association of Arts and Sciences, College of William and Mary, August 2004-present.
- ➤ Virginia Tech Women's Club Basketball Team, September 2000-May 2001. Travel to other universities for tournaments. Involvement in fundraising events and community service.
- ➤ American Council on Exercise Certified Personal Trainer, May 2001-May 2003.
- > CPR certified, May 2001 June 2004.
- ➤ Microbiology Club of Virginia Tech, September 2000-May 2001. On-going project includes research on fecal coliform contamination in local Duck Pond.
- National Honor Society inducted April 1997.
- ➤ Who's Who Among High School Students 1998.

# **CONFERENCES ATTENDED:**

- ➤ 2005 Laser Bioscience Workshop, Newport News, VA. Participant.
- ➤ 2005 American Vacuum Society regional meeting, Jefferson National Laboratory, Newport News, VA. Poster presentation, 2<sup>nd</sup> place: *The Use of Time-of-Flight SIMS to Provide High Mass Molecular Ion Identification of Selected Peptide Hormones on Silver Substrate.*
- ➤ 2005 Laser Processing Consortium, Jefferson National Laboratory, Newport News, VA. Participant.
- ➤ 2004 American Vacuum Society regional meeting, Research Triangle Park, NC. Poster presentation: The Use of Time-of-Flight SIMS to Provide High Mass Molecular Ion Identification of Selected Peptide Hormones on Silver Substrate.
- ➤ 2004 Sensors Gov, Virginia Beach Pavillion, Virginia Beach, VA. Participant.
- 2004 Laser Processing Consortium, Jefferson National Laboratory, Newport News, VA. Participant

#### **REFERENCES:**

➤ Available upon request.